Remarks

In response to the Office Action mailed February 9, 2006, the Applicants respectfully request reconsideration in view of the following remarks. Claims 1, 5, 14, 17, 25, 36, 43, 49, 60, 69, 78, and 84 have been amended and claims 6, 40, and 53 have been canceled. The claims have been amended to correct typographical errors and to clarify that the plurality of values in a traffic log include a packet state, wherein the packet state includes at least one of the following: an OK state, an illegal state, and an error state, and to clarify that a histogram is utilized to monitor network conditions in near real-time enabling the detection and correction of network overloads and congestion before network customers are affected. Support for these amendments may be found on page 4, lines 13-15, page4 lines 4-19, and on page 6, line 19 through page 7, lines 1-7. No new matter has been added.

Claims 1-87 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ennis (U.S. 5,867,483) in view of Tams (U.S. 6,327,620) in view of Schaffer (U.S. 6,219,050) and further in view of Hernandez (U.S. 6,208,977).

Applicant's Statement of the Substance of the Interview

A telephonic interview between Applicants' representative Alton Hornsby, III (Registration No. 47,299) and the Examiner was held on April 20, 2006 to discuss the Hernandez reference and a proposed amendment to independent claim 1 with respect to a feature reciting the generation of billing data on a per packet basis using information from stored traffic logs. The Examiner asserted that proposed feature, while not specifically disclosed by Hernandez, was probably known in the art and suggested that Applicants' representative amend the claims to specify additional features such as, for example, providing more details on how the billing data is generated.

Claim Rejections - 35 U.S.C. §103

In the Office Action, claims 1-87 are rejected as being unpatentable over Ennis, Tams, Schaffer, and Hernandez. As noted above, claims 6, 40, and 53 have been canceled. The rejection of the remaining claims is respectfully traversed.

Amended independent claim 1 specifies a method of monitoring a packet-switched network using traffic logs. The method includes: (a) creating a histogram file; (b) generating a traffic log at a first location within the network based upon detection of a packet, the traffic log containing a plurality of values detected from the packet including a network entry point, a network exit point of the packet, and a packet state, wherein the packet state includes at least one of the following: an OK state, an illegal state, and an error state; (c) transferring the traffic log from the first location to a second location; (d) storing the traffic log generated by the network at the second location; (e) analyzing the stored traffic log to determine the time of creation of the traffic log and the network entry and exit points of the packet; and (f) updating the histogram file using at least the time of creation of the traffic log, at least the packet state and at least one of the entry and exit points of the packet, wherein the histogram file is utilized to monitor network conditions in near real-time enabling the detection and correction of network overloads and congestion before network customers are affected.

It is respectfully submitted that neither Ennis, Tams, Schaffer, nor, Hernandez, alone or in combination, teaches, discloses, or suggests each of the features specified in amended independent claim 1. For example, the cited references fail to disclose generating a traffic log at a first location within the network based upon detection of a packet, the traffic log containing a plurality of values detected from the packet including a network entry point, a network exit point of the packet, and a packet state, wherein the packet state includes at least one of the following:

an OK state, an illegal state, and an error state, and updating a histogram file using at least the time of creation of the traffic log, at least the packet state and at least one of the entry and exit points of the packet, wherein the histogram file is utilized to monitor network conditions in near real-time enabling the detection and correction of network overloads and congestion before network customers are affected.

As noted in the Office Action, Ennis fails to teach generating a traffic log at a first location within the network based upon detection of a packet, the traffic log containing a plurality of values detected from the packet including a network entry point and a network exit point of the packet, and updating a histogram file using at least the time of creation of the traffic log and at least one of the entry and exit points of a packet. Ennis also fails to teach updating a histogram file using a packet state which includes an OK state, an illegal state, or an error state. On the contrary, Ennis merely discloses the updating of probe data indicating number of bits transmitted on specified transmission circuits for a sampling interval and bandwidth utilization information (see col. 3, lines 58-64 and col. 4, lines 45-54). Ennis also fails to disclose that the histogram is utilized to monitor network conditions in near-real time enabling the detection and correction of network overloads and congestion before network customers are affected (Ennis is concerned with the measurement of peak throughput in packetized data networks – see Abstract).

Tams, relied upon to cure the deficiencies of Ennis, also fails to disclose updating a histogram file using a packet state as specified in amended independent claim 1. Rather, Tams is concerned with the counting of packets and bytes over a specified time interval (see col. 3, lines 44-65). Moreover, as noted in the Office Action, both Tams and Ennis also fails to teach generating a traffic log at a first location based upon detection of a packet, the traffic log

containing a plurality of values detected from the packet including a network entry point and a network exit point of the packet.

Schaffer, relied upon to cure the deficiencies of Ennis and Tams, fails to disclose generating a traffic log at a first location within the network based upon detection of a packet, the traffic log containing a plurality of values detected from the packet including a network entry point, a network exit point of the packet, and a packet state, wherein the packet state includes at least one of the following: an OK state, an illegal state, and an error state. On the contrary, Schaffer merely discloses the display of the time relationship between packets and the source and destination nodes of each packet in a network. Detailed information from a packet is included in the display and includes the relative time of the packet, packet size (in bytes), name of the source node, port number at the source node, name of the destination node, port number at the destination node, and a protocol decode of the packet (see Fig. 1, col. 1, lines 17-35, col. 2, lines 24-31, and col. 6, lines 5-27).

Hernandez, relied upon to cure the deficiencies of Ennis, Tams, and Schaffer, is relied upon for disclosing the generation of billing data. As noted above, this feature has been canceled from clam 1. Moreover, Hernandez fails to disclose the other features specified in amended independent claim 1 such as, for example, generating a traffic log at a first location within the network based upon detection of a packet, the traffic log containing a plurality of values detected from the packet including a network entry point, a network exit point of the packet, and a packet state, wherein the packet state includes at least one of the following: an OK state, an illegal state, and an error state, and updating a histogram file using at least the time of creation of the traffic log, at least the packet state and at least one of the entry and exit points of the packet, wherein the histogram file is utilized to monitor network conditions in near real-time enabling

the detection and correction of network overloads and congestion before network customers are affected.

Based on the foregoing, neither Ennis, Tams, Schaffer, nor Hernandez, alone or in combination, teaches, discloses, or suggests each of the features specified in amended independent claim 1. Therefore, claim 1 is allowable and the rejection of this claim should be withdrawn. Amended independent claims 14, 25, 36, 43, 49, 60, 69, 78, and 84 specify similar features as amended independent claim 1 and are thus allowable for at least the same reasons. Dependent claims 2-5, 7-13, 15-24, 26-35, 37-39, 41-42, 44-48, 50-52, 54-59, 61-68, 70-77, 79-83, and 85-87 are also allowable for least the same reasons as independent claims 1, 14, 25, 36, 43, 49, 60, 69, 78, and 84 from which they depend. Accordingly, the rejection of claims 1-5, 7-39, 41-52, and 54-84 should be withdrawn.

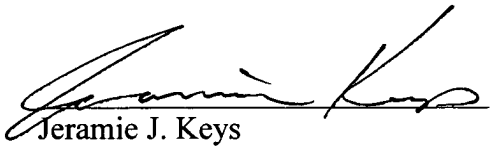
Conclusion

In view of the foregoing amendments and remarks, this application is now in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is invited to call the Applicant's attorney at the number listed below.

At this time, no fees are believed due. However, please charge any additional fees or credit any overpayment to Deposit Account No. 50-3025.

Respectfully submitted,

Date: April 28, 2006



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